# A B S T R A C T

The professional development of public health leaders requires competency-based instruction to increase their ability to address complex and changing demands for critical services. This article reviews the development of the Leadership Competency Framework by the National Public Health Leadership Development Network and discusses its significance.

After reviewing pertinent literature and existing practice-based competency frameworks, network members developed the framework through sequential use of workgroup assignments and nominal group process. The framework is being used by network members to develop and refine program competency lists and content; to compare programs; to develop needs assessments, baseline measures, and performance standards; and to evaluate educational outcomes. It is a working document, to be continually refined and evaluated to ensure its continued relevance to performance in practice.

Understanding both the applications and the limits of competency frameworks is important in individual, program, and organizational assessment. Benefits of using defined competencies in designing leadership programs include the integrated and sustained development of leadership capacity and the use of technology for increased access and quality control. (*Am J Public Health*. 2000;90: 1202–1207)

# Competency Development in Public Health Leadership

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As the complexity of the challenges facing the public health workforce has increased, many have argued that insufficient resources have been devoted to the preparation of the workforce, including its leaders. Here we describe the growth of national advocacy for public health leadership and workforce development. We discuss the creation of the National Public Health Leadership Development Network (NLN), a consortium of institutes providing a system for leadership development, and we review the network's creation of the Leadership Competency Framework for core curriculum design and development of performance standards for public health practice.

Recent reports of the Health Resources and Services Administration to the president and Congress on the status of health personnel in the United States have detailed trends affecting the health of the nation, including increased demands for a competent public health workforce and for appropriately educated leadership. <sup>1–4</sup> The Institute of Medicine report *The* Future of Public Health called for sustained workforce capacity development to accommodate demands of emerging public health problems and an evolving public health system.<sup>5</sup> The report argued that public health will serve society effectively only if a more efficient, scientifically sound system of practitioner and leadership development is established. Other concerns included the lack of sufficient academic preparation of fieldworkers, the need for professional development for those administering the system, and the need to expand the pool of personnel prepared to perform essential public health services within an increasingly complex system.

The Joint Council of Governmental Public Health Agencies Work Group on Human Resources Development also published a report about policy and public health education and training. The report highlighted multilevel demands for advanced professional development to prepare leadership to implement population-based prevention strategies for a diverse population through management and infrastructure development. In addition, health system reform, including the growth of managed care, requires leaders who understand system change dynamics and management of a diverse workforce. Often, however, public health leaders have not had access to or received formal education in public health. The joint council concluded that collaboration among governmental public health agencies and schools of public health is necessary to meet new demands for a system of intensified, accessible, sustained professional development programs.<sup>6</sup>

Several other national reports have underscored the lack of visionary leadership with both technical and management expertise, including a lack of competency in the core public health sciences. 7-10 The Institute of Medicine report Education for the Public Health *Professions* advised schools of public health to increase the number of graduates who can assume system-level leadership positions and to recruit senior-level practitioners and midcareer professionals who can be prepared for positions demanding unique expertise. 11 Recently, federal support for creation of networks of public health education and training centers has increased, owing to recognition of the formidable challenge of providing an effective system to retrain the existing public health workforce. Coordination and continued support of efforts among educational and training centers and the federal, practice, and academic sectors will be required to increase access to professional development programs for the public health workforce and learning organizations. 12-16

Professional development programming has expanded over the last 30 years, offering academic credit, professional licensure or certification credit, and enrichment courses. However, there has been a lack of systematic needs assessment, consistent data collection, and formal standards for measurement of knowledge or competency (preparedness). Concern for

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the quality and performance of the US public health workforce, with particular emphasis on leadership competence, has increased demands for public health practice standards and competency frameworks.

# The National Public Health Leadership Development Network

In 1991, the Public Health Practice Program Office of the Centers for Disease Control and Prevention (CDC) began to provide technical assistance and support for the establishment of state, regional, and national public health leadership institutes throughout the country. A network of such institutes has been established through academic and practice collaborations among schools of public health and state public health departments across the United States, resulting in the establishment of 8 state institutes (3 more are in the planning stage), 6 regional institutes, and 1 national institute that provides access to leadership training for senior-level practitioners in all states. The state and regional institutes serve local practitioners and community stakeholders in

The curricula of these 1- to 2-year programs have been designed to enhance leadership competence in facilitating performance of the essential services of public health practice. Enhanced leadership competence, in turn, enhances individual and organizational competence in improving and promoting the health of communities nationwide. These institutes provide access to a unique professional development opportunity for a broad array of public health professionals and other stakeholders who are integral to the development of healthy communities.

In 1994, the Public Health Practice Program Office sponsored a cooperative agreement with the Association of Schools of Public Health and Saint Louis University, in collaboration with the Missouri Department of Health, to establish the NLN. 17 The purpose of the NLN was to support the growth of public health leadership institutes throughout the country and to provide a formal means for academic and practice institute directors and program alumni to work together to attain mutual objectives.

Since 1994, annual NLN conferences and business meetings have been held and technical assistance has been provided to further enhance and expand access to leadership and public health workforce development throughout the country. NLN work group and advisory board projects, established on an annual basis, have resulted in the following accomplishments:

· Development of a conceptual model for design of leadership programs

- Dissemination of program design models, technology mediation methods, and best practices
- Development of strategies for program evaluation and marketing
- Advocacy for support and resource development
- Technical assistance for development of additional international, national, regional, and state program models
- Formal linkages with other national organizations to collaborate on leadership and public health workforce development projects
- Assessment of alumni network and program development needs
- Development of the NLN Web site for communication and dissemination of information
- · Development of the Leadership Competency Framework

# Competency Development

Continuing professional education has traditionally focused on the practice needs of individuals who have specialized degrees and experience in the field. This form of education has generally led to professional credentials or certification, rather than academic credentials or credit.<sup>18</sup> In recent years, concern for the quality and competitiveness of the public health workforce has led to increased demands for educational and practice standards. Sustained development of professional or practice-based preparedness must be based on clear conceptual designs that contribute to the acquisition and measurement of knowledge, skills, and competencies. Acquired competencies should be confirmed through short- and long-term evaluation measures.

Academic and practice members of the NLN agreed that identifying development and competency needs of individuals who aspire to or hold public health leadership positions was a priority for the network. Identification of competence requirements is of particular concern because practitioners within public health are prepared in a wide array of professional programs or disciplines. There is not a single professional organization that serves the needs of those in leadership positions, defines the role of public health leadership, establishes competencies and standards related to practice, or measures the content and quality of programs offered.

Needs assessment and development of standards are particularly critical for the design, development, and evaluation of a nationwide system of leadership and public health workforce development. Systemwide design of competency frameworks, clusters and levels of curriculum content, and individual modules should be based on expected performance levels identified collaboratively by the academic and practice sectors. <sup>19,20</sup> Sustained networks of collaboration provide an efficient means for producing consistent core competencies and curriculum content and determining levels of professional development, prerequisite criteria, and measurement and evaluation protocols.

The validation of a competency framework and the development of standards also protect the interests of those wishing to define their area of practice and obtain public and professional recognition for achievement and performance. Determining necessary competencies provides a foundation for standards development that can be used to operationalize teaching objectives and design impact and outcome evaluation methods. Ultimately, measuring program outcome and impact satisfies all stakeholders: providers, practitioners, consumers, and sponsors.<sup>21</sup> Clusters of competencies, aptitudes, or ability achieved may be indicative of the potential for future achievement.<sup>22</sup>

Growing demands and competition for federal and private funding to support public health workforce development have resulted in pressure for competency-based programming and performance measurement to demonstrate quality and accountability. Competency-based instruction is a means to achieve accountability through teaching practice-based clusters of knowledge and skills, the mastery of which builds the foundation for individual performance evaluation.

# Development of the Leadership Competency Framework

Members of the NLN identified the need for a competency framework specific to professional preparation of public health leaders as a priority in planning the 1995 annual conference of the NLN. A process was identified to involve all network members in the development of such a framework. Initially, the NLN Competency Work Group, consisting of members from the academic and practice sectors, reviewed the literature on leadership development and existing competency frameworks, including the following:

- Public Health Faculty/Agency Forum's Public Health Competencies<sup>7</sup>
- · University of North Carolina School of Public Health's Doctorate in Public Health Leadership Competencies
- Johns Hopkins University School of Hygiene and Public Health's Community Based Public Health Competencies

- Association of Schools of Public Health Maternal and Child Health Council's Maternal and Child Health Competencies
- Public Health Core Functions and Essential Services<sup>11</sup>

The work group began the process of identifying major areas of leadership practice and corresponding competencies by defining the following core categories and their characteristics:

- Transformation—Public health needs and priorities require leaders to engage in systems thinking, including analytical and critical thinking processes, visioning of potential futures, strategic and tactical assessment, and communication and change dynamics.
- Legislation and politics—The field of public health requires leaders to have the competence to facilitate, negotiate, and collaborate in an increasingly competitive and contentious political environment.
- Transorganization—The complexity of major public health problems extends beyond the scope of any single stakeholder group, community unit, profession or discipline, organization, or government unit, thus requiring leaders with the skills to be effective beyond their organizational boundaries.
- Team and group dynamics—Effective communication and practice are accomplished by leaders through building team and work group capacity and capability.

Network members attending the 1995 conference formed additional work groups that considered the core categories and radical changes that would challenge existing paradigms and affect public health in future decades. A nominal group process and focus groups were used to develop a competency list for each of the core areas and prepare a draft of the NLN Leadership Competency Framework. A postconference work group reviewed the draft; refined the wording, integration, and grouping of competencies; and made recommendations for further review.

The Leadership Competency Framework was reviewed and edited by NLN members and work groups in preparation for the 1996 conference and was revisited prior to the 2000 conference. The final framework consisted of 79 competencies (see Table 1). The framework was adopted by NLN academic and practice members, including representative graduates of NLN institutes. The framework reflects the following conclusions and recommendations by NLN work groups:

• The framework is designed as a guide for curriculum content and module development, for design of levels or categories of professional development, for consideration of prerequisite criteria, and for development of performance measures and evaluation methods.

- The competencies can be used to determine curriculum content at both basic and advanced levels, depending on participants' abilities and accomplishments.
- The transformational area encompasses universal "change agent" competencies necessary for effective performance of the competencies in the other 3 framework areas: political, transorganizational, and team building.
- Competencies identified as basic management knowledge or skills were not included in this framework but were considered as "prerequisites" or for inclusion in other levels of management education programs.
- The framework should be used by the NLN to develop standards for measurement of leadership performance in collaboration with development of state and local instruments for use in measuring organizational performance of public health core functions and essential services.
- The framework should be regularly reviewed and edited to reflect evolving competency criteria for refinement of public health leadership performance standards.

# **Discussion**

The Leadership Competency Framework is a baseline set of competencies designed by academic and practice members of the NLN. Although the network began this process informally, to meet the needs of its members, the resulting framework can be used by others in preparing a core curriculum for educating leaders in health settings. The framework is being used by NLN members to develop and refine program competency lists and content; to compare programs for core content; to develop needs assessments, baseline measures, and performance standards; and to evaluate educational outcomes. It is considered a working document and will continue to be refined as it is applied in leadership training and practice.

Commitment to competency-based instruction using the Leadership Competency Framework requires a commitment to ongoing evaluation to ensure the continued relevance of the framework to practice. The framework represents the opinions and experience of NLN academic and practice members at this time and needs to be validated through observation of leaders in practice settings.

An understanding of both the applications and the limits of competency frameworks is important in individual, program, and organizational assessment. Among the questions to be asked are, What are the implications for individual competency profiles and career mapping and counseling? What are the potential applications for job and productivity analyses? Could competency frameworks be used in assessment, certification, and selection of public health leaders? If so, how? How can the competency standards be used to assess and clarify the current body of knowledge and methodologies in public health leadership, and to identify areas for educational evaluation and resource development?

Recently, there has been a call for certification or accreditation of local and state health departments, based on standards and a common conceptual framework for public health practice as it affects both internal and external constituencies. If a mechanism is established for certifying or accrediting public health departments, it could emphasize health objectives and capacity-building efforts that elevate the role and increase the recognition of these agencies.<sup>23</sup> Although controversial, the issue of certification of local and state administrators is germane to the related interest in formalizing performance criteria for public health leaders. A network of leadership development institutes could serve as a professional development system providing education and trainmeet programs to required competency-based standards for voluntary or formal certification.

The benefits of using defined competencies in designing leadership programs include the integrated and sustained development of leadership capacity and the use of technology for increased access to and quality control of these programs. Targeting education to specific tasks and competencies allows adaptation to the object-oriented planning that is necessary in most Web-based and distance learning applications,<sup>24</sup> applications that contribute to greater control by learners over the sequence and pace of study. Learner control is important in providing sustained and advanced professional development programming and in improving the integration of learning materials and content, considered important in the dynamic, specialized, and diverse field of public health practice. Competency-based education also allows segmentation of material into distinct study units to meet the needs of specific individuals and groups. Segmentation and increased flexibility are crucial to the kind of "hypertext," "point of need," or "point of interest" learning that takes place in a computerdominated environment, as compared with the more hierarchical structure of standardized educational programs.

A note of caution is in order. While there are many advantages to the targeted approach

#### TABLE 1—Public Health Leadership Competency Framework Developed by the National Public Health Leadership Network

- I. Core transformational competencies A. Visionary leadership
  - 1. Articulate future scenarios in terms of alternatives for change
  - 2. Develop and articulate vision
  - 3. Encourage and support others to share the vision
  - 4. Identify and incorporate innovative concepts and methods into strategic decision making

#### B. Sense of mission

- 1. Identify, articulate, and model professional values, beliefs, and ethics
- 2. Facilitate mission development
- 3. Identify and articulate the content, purpose, and value of vision and mission statements
- 4. Facilitate reassessment and adaptation of mission to vision
- Communicate effectively to translate understanding of mission and vision into action

#### C. Effective change agent

- 1. Develop creative capacities to optimize learning, critical thinking, and analysis skills
- 2. Model active learning and personal masterv
- 3. Model and facilitate integration of cultural sensitivity and competence
- Facilitate utilization and application of systems thinking
- 5. Articulate the difference between transforming changes affecting general direction and policies and those related to day-to-day implementation and operations
- 6. Develop and implement evaluation systems in relation to change strategies
- 7. Identify, create, and balance critical dynamic tension in relation to change strategies
- Facilitate application of change theories and concepts to practical situations
- Facilitate and create dialogue
- 10. Build organizational capacity to envision and select strategies to address acute problems
- 11. Facilitate strategic and tactical assessment and planning
- 12. Recognize and reconcile emotional and rational elements in collaboration building and strategic planning
- 13. Determine and model when and how to include risk taking in strategic actions
- 14. Facilitate empowerment of others to take action

# II. Political competencies

#### A. Political processes

1. Direct, facilitate, and continually refine mission-driven strategic planning processes at policy,

- management, and operational levels
- 2. Identify and communicate political processes and variables operating at federal, state, and local levels
- 3. Evaluate and determine appropriate actions regarding critical political issues
- 4. Identify and analyze policy issues and alternatives related to selected public health problems
- Develop, implement, and evaluate advocacy, community education, and social marketing strategies to achieve national, state, and local health goals and objectives
- Utilize principles of media advocacy to communicate the public health mission, values, objectives, and priorities to target audiences, including executive and legislative bodies, community organizations, and stakeholders, to facilitate public policy change
- 7. Assess existing political resources to address the needs of diverse and underserved communities
- 8. Develop and implement collaborative strategies, such as coalitions advocacy groups, to involve all constituencies and stakeholders
- 9. Select and implement models to guide political action regarding infrastructure development and other capacity-building efforts
- 10. Cooperate and collaborate with efforts to translate community and organizational analyses and plans into specific regulatory actions and legislative proposals
- 11. Guide the community and organization in assisting and supporting legislative deliberation and action on public health issues
- 12. Translate policy decisions into organizational and community structure, programs, and services

#### B. Negotiation

- 1. Identify escalating public health issues and guide or mediate action to avoid crisis levels
- Guide and mediate the investigation and resolution of acute public health crises
- 3. Identify key stakeholders and resources necessary for mediating, negotiating, and/or collective bargaining with political sectors, political action committees, and/or stakeholders

## C. Ethics and power

- 1. Identify, develop, and utilize power-based alliances with values-based and ethical perspectives
- 2. Identify and communicate how

power structures function, utilizing knowledge of transitional and conditional ethics

#### D. Marketing and education

1. Utilize principles of social marketing and health education to communicate routinely with target audiences regarding public health needs, objectives, accomplishments, and critical or crisis-related information

#### III. Transorganizational competencies A. Understanding of organizational dynamics

- 1. Create and employ assessment models to assess organizational environment, needs, assets, resources, and opportunities with respect to mission and policy development and assurance functions
- 2. Identify and communicate new system structures as need is identified and opportunity arises
- Develop system structures utilizing knowledge of organizational learning, development, behavior, and culture

#### B. Interorganizational collaborating mechanisms

- 1. Identify and include key players, power brokers, and stakeholders in collaborative ventures
- 2. Develop, implement, and evaluate collaborative and partnering strategies, including task force, coalition, and consortium development
- 3. Facilitate networking and participation of all stakeholders, including broad and diverse representation of private/public and traditional/nontraditional community organizations
- 4. Facilitate identification of shared or complementary missions and creation of common vision
- 5. Create transorganizational systems that use a commonvalues-based approach with ethical standards
- 6. Develop and evaluate collaborative strategic action plans
- Facilitate change through a balance of critical tensions within collaborative systems

### C. Social forecasting and marketing

- 1. Identify and interpret emerging trends
- 2. Create predictions and build scenarios
- Communicate predictions and scenarios and provide information analysis and interpretation to community partners and constituents

Continued

#### **TABLE 1—Continued**

- Utilize techniques of social marketing within collaborative systems, including media communications, health communications, risk communications, and community relations
- IV. Team-building competencies
  - A. Develop team-oriented structures and systems
    - Assess organizational infrastructure and implement system changes to facilitate team development
    - 2. Facilitate entrepreneurial spirit within team structures
    - Develop team structures and required systems regarding customer service and continuous quality improvement
    - Facilitate outcomes-based team activities related to strategic planning and evaluation objectives
    - Create systems that incorporate structures and resources for team and work group evaluation
    - Facilitate the development of learning teams that promote organizational learning from a systems perspective

- B. Facilitate development of teams and work groups
  - Facilitate development of shared mission, vision, and value statements
  - Facilitate development of clear goals and objectives
  - 3. Facilitate group process
  - Create and implement information and communication processes to facilitate team development
  - Facilitate development and utilization of problem solving, conflict resolution, and decisionmaking skills
  - Identify and communicate need to balance critical tensions for team development
  - Facilitate empowerment and motivation to accomplish objectives
  - 8. Create incentives and reward and celebrate accomplishments
  - Facilitate the development and integration of cultural sensitivity and competence
- Facilitate development of risktaking behavior
- 11. Facilitate development of servant–leadership capacity, including

- selflessness, integrity, and perspective mastery
- Develop opportunities and resources for personal mastery and team learning
- C. Serve in facilitation and mediation roles
  - Diagnose and intervene in marginally productive, dissident, or demoralized team situations
  - 2. Clarify and establish team member roles and responsibilities
  - Clarify and facilitate effective work group processes and relationships
  - Facilitate problem-centered coaching
  - Utilize negotiation skills to mediate disputes and resolve conflicts
- D. Serve as an effective team member
  - Model effective group process behavior, including listening, dialoguing, negotiating, rewarding, encouraging, and motivating
  - Model effective team leadership traits, including integrity, credibility, enthusiasm, commitment, honesty, caring, and trust

of competency-based training, there are also distinct costs and risks. An increased focus on the parts and elements of public health leadership may result in the loss of perspective of the whole. An approach that emphasizes specific learning units, however flexible, may tend to undervalue or ignore the learning and synthesizing abilities of individuals and groups that are particularly critical in leadership development. In this sense, a competency-based approach can run counter to the capacitybuilding theme of those educational designers who place the highest value on sharpening tools for learning among students, rather than imparting specific knowledge or skills. This concern was considered in the design of the Leadership Competency Framework, particularly in the focus on transformational capabilities. This area addresses competencies regarding personal learning, synthesis, analytical and critical thinking processes, decisionmaking dynamics, and systematic adaptation skills.

Finally, overemphasizing the analysis and design components of leadership education carries a risk and potential cost of diluting the emphasis on delivery systems, assessment and monitoring, and teaching processes and methodologies used. Those interested in the field of competency-based education in public health leadership face the formidable challenge

of validating and advancing the work already accomplished as well as identifying the extent of emphasis on other program delivery and process concerns.

Despite these concerns, we believe that the Leadership Competency Framework is a unique and groundbreaking contribution to the understanding of leadership development and the establishment of a foundation that can be used by those in both the academic and practice sectors of public health. 

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#### **Contributors**

K. Wright directed the project, obtained the funding, and wrote the major part of the paper. L. Rowitz assisted in coordinating the project and wrote parts of the paper. A. Merkle codirected the project and contributed to writing the paper. W.M. Reid assisted in development of the project and contributed to writing and editing the paper. G. Robinson assisted in development of the project and contributed to editing the paper. B. Herzog provided technical assistance during the project and contributed to writing the paper. D. Weber coordinated the project and contributed to editing the paper. D. Carmichael, T. Balderson, and E. Baker provided technical assistance during the project and contributed to editing the paper.

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